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EXAMINER

KIM, WESLEY LEO

ART UNIT PAPER NUMBER

2683

DATE MAILED: 09/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/072,714

Applicant(s)

BEN-ARI, HAIM

Examiner

Wesley L Kim

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 106 (Par.21;7). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Banno.

Regarding claim 1, Banno discloses a mobile wireless communications device (Par.13), a method for presenting a direction (Par.16), the method comprising: determining the magnetic bearing of the wireless communications device (Par.10;5-6); and, presenting a direction responsive to the magnetic bearing (Fig.4).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2, 3, 4, 5, 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Banno in view of Lauro et al.

Regarding claim 2, Banno discloses all the limitations as disclosed in claim 1. Banno does not expressly disclose selecting a reference axis having a predetermined relationship to the magnetic bearing. However, Lauro et al discloses an electronic device with a display generating an image of a compass card which indicates at least one compass point, such as north (Col.2;19-23 and Fig.1;22,24 it is obvious the reference axis' 22 and 24 is predetermined with relation to the magnetic bearing in order to behave as a compass), wherein presenting a direction responsive to the magnetic bearing includes displaying the reference axis (Fig.4;22,24). Both Banno and Lauro et al disclose a device for displaying a direction, therefore it would have been obvious to a person of ordinary skill in the art to incorporate Lauro et al's reference axis (compass card) with Banno's mobile device determining a magnetic bearing because it allows the calculation of the direction toward the target with reference to the current position (Par.27;4-7; Banno)

Regarding claim 3, the combination as discussed above discloses all the limitations as disclosed in claim 2. Banno does not expressly disclose a reference axis pointing to magnetic north in his mobile device. Lauro et al discloses a reference axis (22, line segment) pointing to true north (Col.2;23-29, to a skilled artisan, it would have been obvious to modify a device pointing towards true north to magnetic north). Banno and Lauro et al disclose a mobile device for displaying a direction, therefore it would have been obvious

to a person of ordinary skill to incorporate a reference axis pointing to magnetic north with a mobile device determining a magnetic bearing because the pointer is overlaid on the image of the reference axis and rotates around the reference axis's center and also, the compass heading of the desired destination can be read directly from the display (Col.2,31-34; Lauro et al).

Regarding claim 4, Banno does not expressly disclose a display screen with a screen axis, on the other hand Lauro et al does disclose a display screen (Fig.1;14) with a screen axis (Fig.1;18); wherein displaying the reference axis includes: fixedly aligning the reference axis (22,24) with the screen axis (18); and, supplying a direction readout of the reference axis (Fig.1;22,24) responsive to the rotation of the screen axis (18) (Col.2;2-27).

Banno and Lauro et al both disclose a device for displaying a direction, therefore it would have been obvious to a person of ordinary skill in the art to combine Banno's mobile wireless communications device and Lauro et al's device including a display with a screen axis because, when the user is facing directly toward the desired destination, the pointer will point directly along the screen axis (18) (Col.2;9-11; Lauro et al) and this allows the user to be unfamiliar with compass or navigation terminology to determine the route towards the desired destination.

Regarding claim 5, Banno discloses receiving global positioning system (GPS) location information (Par.19;3-11); selecting a landmark having a predetermined location (Fig.4 Target (e,f)), using the GPS information to locate the wireless device (Par.19) however, he does not expressly disclose

generating a reference axis between the wireless communications device location and the landmark location (Fig.4) although he does disclose displaying a map encompassing the current position and the target (Par.43;10-14), on the other hand Lauro et al discloses a display generating a reference axis (Fig.1;22,24). Banno and Lauro et al both disclose a device displaying a direction and at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate a reference axis onto a map displaying the current position and target because it serves as a guide to a path leading from the current position to the target (Par.43;10-15; Banno).

Regarding claim 11, Banno discloses all the limitations as disclosed in claim 1. Banno does not expressly disclose determining the magnetic bearing of the wireless communications device, which includes correcting the magnetic bearing with respect to true North. Lauro et al discloses a representation of the heading of the user with respect to true north (Col.3;40-54). Banno and Lauro et al both disclose a device for displaying a direction and it would have been obvious to a person of ordinary skill in the art to see that the correction of the magnetic bearing of a wireless communications device could be done with respect to true north. One of ordinary skill in the art would have been motivated to do this because this arrangement provides the user with an easy to read pointer and a compass (Col.2;28-34).

5. Claims 6,7,8,9, and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Banno and Lauro et al in further view of Endo et al.

Regarding claim 6, Banno and Lauro et al disclose all the limitations as disclosed in claim 2. Additionally, Banno discloses receiving global positioning system (GPS) location information (Par.19;3-11); receiving map information (Par.43;10-15) and Lauro et al discloses displaying the reference axis (Fig.1;22,24). However Banno and Lauro et al do not expressly disclose all the other limitations of claim 6, however Endo et al does disclose creating and displaying a map display responsive to the map information (Col.9;62-Col.10;18), showing the wireless communications device location on the map (Fig.4;105 car location as opposed to wireless device). All three inventors disclose a device for determining direction and it would have been obvious to a person of ordinary skill in the art to combine Banno and Lauro et al's mobile device with Endo's navigation system because the map encompasses the current position and the target serving as a guide to a path leading from the current position to the target (Par.43;10-15).

Regarding claim 7 and 8, the combination as discussed above discloses all the limitations as disclosed in claim 6 in which the wireless communications device includes a display screen with a screen axis (See Claim 4 rejection); wherein displaying the reference axis includes: fixedly aligning the reference axis with the screen axis (See Claim 4 rejection).

Lauro et al also discloses displaying a reference axis including displaying the magnetic bearing of the reference axis (Fig.1;22,24, N,S,E,W).

Banno and Lauro et al do not expressly disclose a rotating the map display in response to the rotation of the screen axis but Endo et al does

disclose a rotation of a map when necessary (Col.11;64-Col.12;4). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to see that the combination of Banno and Lauro et al's mobile device with Endo et al's navigation system would allow for the rotation of a map display responsive to the rotation of the screen axis of Lauro et al. One of ordinary skill in the art would have been motivated to do this because rotating the map allows for encompassing the current position, while moving, and the target serving as a guide to a path leading from the current position to the target (Par.43;10-15).

Regarding claim 9, Banno does not expressly disclose fixedly aligning the reference axis with the screen axis; and, displaying the magnetic bearing of the screen axis, however Lauro et al discloses fixedly aligning the reference axis (22,24) with the screen axis (18) (See claim 4 rejection); and, displaying the magnetic bearing of the screen axis (Fig.1;18). All three inventors disclose a device for displaying a direction and it would have been obvious to a person of ordinary skill in the art to combine the Banno's and Lauro et al's mobile device capable of displaying the magnetic bearing of the screen axis with Endo et al's map display. One of ordinary skill in the art would have been motivated to do this because the map encompasses the current position and the target serving as a guide to a path leading from the current position to the target (Par.43;10-15) and when the user is facing directly toward the desired destination, the pointer will point directly along the screen axis (Col.2;9-11; Lauro et al). This allows the user to be unfamiliar with

compass or navigation terminology to determine the route towards the desired destination.

Regarding claim 10, the combination as discussed above discloses all the limitations as disclosed in claim 9. Banno and Lauro et al do not expressly disclose displaying a magnetic bearing icon on the map however, Endo et al does disclose a mark (Fig.1;105), which represents the present position and direction of the user. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the Banno's and Lauro et al's mobile device capable of displaying the magnetic bearing of the screen axis with Endo et al's map displaying a magnetic bearing icon (105 mark) on the map because it allows the user to see the area encompassing the users current position and direction, represented by an icon, with respect to the screen axis, this serving as a guide to a path leading from the current position to the target.

6. Claims 12-15, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al in view of Lauro et al.

Regarding claim 12, Kato et al discloses a mobile wireless communications device (Fig.1) comprising, a magnetic detection circuit to determine orientation in a magnetic field (Fig.2;30), and the magnetic detection circuit having an output to supply a magnetic bearing signal responsive to the determined orientation (Par.30;4-11). Kato et al does not expressly disclose all the other limitations of claim 12, however, Lauro et al does disclose a system for indicating a direction (Col.1;50) with a direction

circuit (Col.3;38-40, output of a circuit is a signal representing a direction so it is obvious that a direction circuit is there) to communicate a reference axis signal (Col.2;17-23, a compass card displays reference axis and the presence of a reference axis suggests there is a reference axis signal present); and, a user interface screen (Fig.2;14) having an input to receive the reference axis signal and an output display responsive to the magnetic bearing of the wireless communication device (Fig.2;14, you can see an input going into the interface). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the mobile device of Kato et al along with Lauro et al's device to create a mobile device with direction finding capabilities because it would This allows the user to be unfamiliar with compass or navigation terminology to determine the route towards the desired destination (Col.2;9-15; Lauro et al).

Regarding claim 13, the combination as discussed above discloses all the limitations as disclosed in claim 12 and the reference axis signal to include the direction of the reference axis. Lauro et al discloses wherein the direction circuit (Col.3;38-40) has an input (Fig.2;49, an arrow into the circuit (49) indicates an input) to accept data defining a relationship between the magnetic bearing and a reference axis (Col.3;38-40, the output represents the user's heading relative to a reference axis implying the input contains data defining some sort of relationship between the magnetic bearing and a reference axis),

wherein the direction circuit determines the direction of the reference axis based on the defined relationship (Col.3;38-40, the users heading is relative to reference axis therefore if the heading changes the direction of reference axis adjusted accordingly by the direction circuit. ),; and, wherein the user interface screen displays the reference axis direction (Fig.1;14). Kato et al and Lauro et al both disclose a device for displaying a direction and therefore, it would have been obvious to one skilled in the art to create a mobile device with direction finding capabilities and the ability to display a reference axis on the screen because this arrangement provides the user with a easy to read pointer in the direction of the desired destination and a compass (Col.2;28-34).

Regarding claim 14, the combination as discussed above discloses all the limitations as disclosed in claim 13. Lauro et al discloses a user's heading relative to magnetic north, (Col.3;38-40, relative to magnetic north indicates a reference axis being magnetic north). He also discloses a user interface (Fig.1;14) with an icon representing magnetic north (Fig.1;14, N is the icon indicating magnetic north). Both Lauro et al and Kato et al disclose a device indicating direction and therefore it would have been obvious to one skilled in the art to disclose a user interface with an icon representing magnetic north to allow for the ability to indicate the primary compass directions (Col.2,39-42).

Regarding claim 15, Lauro et al discloses a user interface screen with a surface (Fig.1;14) with a screen axis defined with respect to the surface (Fig.1;18); and, wherein the direction circuit defines the reference axis to be

fixedly aligned with the screen axis (Col.3;38-40, the circuit defines the user heading with respect to reference axis, magnetic north so the circuit defines a reference axis which is aligned with the screen axis. See Fig.1;18,22,24) and the reference axis signal is responsive to the rotation of the screen axis (Col.2;24-28, The compass card (reference axis) rotates depending on the way the device is oriented so it is obvious that the reference signal is responsive to the rotation of the screen axis); and, wherein the user interface screen displays the direction of the screen axis(Fig.1;18). Kato et al and Lauro et al both disclose a device for displaying a direction and therefore, it would have been obvious to one skilled in the art to create a mobile device with direction finding capabilities and the ability to display a reference axis and screen axis on the screen because this arrangement provides the user with a easy to read pointer in the direction of the desired destination and a compass (Col.2;28-34) and the ability to be aware of the current heading.

Regarding claim 22, Kato et al does not expressly disclose a magnetic detection circuit that corrects the magnetic bearing with respect to true North however, Lauro et al does disclose a circuit that corrects the magnetic bearing with respect to true north (Col.3;44-54). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine Kato et al's mobile communication device with Lauro et al's direction finding device with a circuit that corrects the magnetic bearing with respect to true north because provides a direction signal of the user's desired destination, irrespective of the user's heading (Col.3;60-63).

7. Claim 16, 17, 18, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al and Lauro et al in further view of Banno.

Regarding claim 16, Kato et al and Lauro et al disclose all the limitations as disclosed in claim 13 and in addition, a direction circuit (Fig.2;49 Lauro et al), a GPS circuit ( Fig.2; 25,Kato et al) providing location information and an input (Fig.1;15 Kato et al) for selecting a landmark and a direction circuit whose output is a signal representing the users heading relative to magnetic north (Col.3;38-40,Lauro et al), wherein the direction circuit uses the GPS information to locate the wireless device. To a skilled artisan, it would be obvious to see that an output of the direction signal representing the users heading relative to magnetic north would indicate an input with GPS information containing information about the user and landmark location. Kato et al and Lauro et al do not expressly disclose a direction circuit that generates a reference axis signal defining a vector between the wireless communications device location and the landmark location but from Fig.4 of Banno, you can see that he has a drawing of a vector from the antenna of the phone to the target (Fig.4) implying the existence of a reference axis signal defining a vector. At the time the invention was made, it would have been obvious to one skilled in the art to apply a device with GPS guided direction finding abilities to generate a vector between the user and destination because it would point in the direction of the users desired destination irrespective of the user's heading (Col.3;55-63, Lauro et al) making it easier for the user to reach the destination.

Referring to claim 17, the combination above discloses all the limitations of claim 13 in addition a direction circuit, an input to receive GPS location information, and a reference axis signal. Banno discloses a map being displayed on the display of a mobile phone (Par.4310-15), which implies the existence of an input to receive map information, and Fig.3 reference no. 13 indicates that the map is oriented in a directional coordinate system. The direction circuit uses the GPS and map information to generate a map showing the location of the wireless communications device (Par.43;10-15), and wherein the direction circuit supplies a map signal for displaying the map with the reference axis signal (Par.43;10-15,a map is displayed and the presence of a reference axis is referred to in the above claim so it is obvious that a map signal exists); and, wherein the user interface screen accepts the map signal and displays the map in response to the map signal. It is obvious to one skilled in the art to see that if a map is displayed then the interface accepts the signal. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the GPS and map signals with a wireless communications device to have a map showing the location of the wireless communications device so this would allow the user to conveniently see the path leading from the current position to the target (Par.43;12-15).

Referring to claim 18, the above combination discloses all the limitations as disclosed in claim 17. Lauro et al discloses a user interface (Fig.1;14) and it is obvious to one skilled in the art that the screen has a

surface. He also discloses a screen axis defined with respect to the surface (Fig. 1; 18); wherein the direction circuit defines the reference axis to be fixedly aligned with the screen axis (Col. 3; 38-40, the circuit defines the user heading with respect to reference axis, magnetic north so the circuit defines a reference axis which is aligned with the screen axis. See Fig. 1; 18, 22, 24) and rotates the map directional coordinate system in response to the reference axis; and, wherein the user interface screen rotates the map display in response to rotations of the screen axis (Col. 2; 24-28, The compass card (reference axis) rotates depending on the way the device is oriented so it is obvious that the reference signal is responsive to the rotation of the screen axis). At the time the invention was made, it would have been obvious to one skilled in the art to create a mobile device with direction finding capabilities and the ability to display a reference axis and screen axis on the screen because this arrangement provides the user with a easy to read pointer in the direction of the desired destination and a compass (Col. 2; 28-34) and the ability to be aware of the current heading.

Referring to claim 19, Lauro et al discloses a user interface screen displays the direction of the screen axis (Fig. 1; 18). At the time the invention was made, it would have been obvious to one skilled in the art to create a mobile device with direction finding capabilities to have a user interface displaying the direction of the screen axis so that the user will know where they stand with respect to the destination so that he may adjust his heading to go toward the desired direction (Col. 2; 1-15).

Referring to claim 20, Lauro et al discloses a user interface (Fig.1;14) and it is obvious to one skilled in the art that the screen has a surface. He also discloses a screen axis defined with respect to the surface (Fig.1;18). the direction circuit defines the reference axis to be fixedly aligned with the screen axis (Col.3;38-40, the circuit defines the user heading with respect to reference axis, magnetic north so the circuit defines a reference axis which is aligned with the screen axis. See Fig.1;18,22,24) and transposes the screen axis direction (Fig.1;18) onto the map directional coordinate system (Fig.1;22,24). Lauro et al does not expressly disclose a user interface screen displaying a map showing the location of the wireless device, however Banno discloses a screen displaying a map that provides the current position of the wireless device (Par.43;10-15). At the time the invention was made, it would have been obvious to one skilled in the art to create a wireless communications device to have a map showing the location of the wireless communications device along with the direction of the screen axis so this would allow the user to conveniently see the path leading from the current position to the target (Par.43;12-15) and displaying the direction of the screen axis so that the user will know where they stand with respect to the destination so that he/she may adjust their heading to go toward the desired direction (Col.2;1-15).

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al, Lauro et al, and Banno in further view of Endo.

Referring to claim 21, Kato et al, Lauro et al, and Banno disclose all the limitations of claim 20 in addition to the directional circuit but they do not expressly disclose a generation of a directional icon, overlaid on the map. Endo does disclose a directional icon, overlaid on the map (Fig.1;105). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the Banno's, Lauro et al, Kato et al, and Endo's mobile device capable of displaying the magnetic bearing of the screen axis with Endo et al's map displaying a directional icon (105 mark) on the map because it allows the user to see the area encompassing the users current position and direction, represented by an icon, with respect to the screen axis, this serving as a guide to a path leading from the current position to the target.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L Kim whose telephone number is 703-605-4319. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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